

To: Examiner Angebranndt, GAO 1795
Fax: 571-272-1378
From: Joseph Buczynski
Re: US 10/553,176

Examiner Angebranndt:

Attached are our proposed amendments. I look forward to discussing the application with you at 2PM on Wednesday, June 2.

Sincerely,

Joe Buczynski

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*Proposed
Amendments
Dated [unclear]*

IN THE SPECIFICATION

Please replace the paragraph on page 12, lines 1-10, of the specification with the following new paragraph:

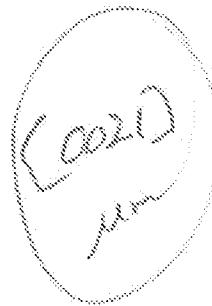
A thickness of the above-described anti-corrosion film 12 is not particularly limited as long as it can perform the above-described effect (namely, such effect that corrosion will not occur by a resin material used for an optical disk substrate). Usually, the thickness can optionally be set according to frequency in using of the stamper (specifically, how many optical disk may be reproduced by using said stamper) and the like. For example, the above-described effect can surely be achieved by the thickness of about 30-200 μm nm, preferably, 30-100 μm nm.

*Do not
Edit*

IN THE CLAIMS:

Please amend the claims as follows:

Do not file



1. (Currently Amended) A stamper used for An injection molding method of an optical-disk manufacturing a substrate by using made of a resin material, comprising steps of: providing a stamper comprising a metallic main body and wherein an anti-corrosion film comprising made of any one of an alloy selected from the group consisting of a nickel alloy, a silver alloy and a copper alloy, wherein the anti-corrosion film is formed on the a surface of the stamper contacting metallic main body with a convex or concave pattern; and making contact of the anti-corrosion film with the resin material to mold the resin material into the substrate, wherein the anti-corrosion film is with a thickness of 30-200 nm.
2. (Currently Amended) A stamper An injection molding method according to claim 1, wherein the nickel alloy comprises nickel as a main ingredient and one or more element selected from the group consisting of ruthenium, copper, phosphorus, magnesium, chromium, gold, silicon, titanium and silver, is added thereto.
3. (Currently Amended) A stamper An injection molding method according to claim 1, wherein the silver alloy comprises silver as a main ingredient and at least one element selected from gold or copper is added thereto.

4. (Currently Amended) A stamper An injection molding method according to claim 1, wherein the copper alloy comprises copper as a main ingredient and at least one element selected from silver or titanium is added thereto.

5. (Currently Amended) A method for manufacturing the a stamper used in the an injection molding using the of a substrate out of a resin material, characterized in that said method comprises steps of:

using providing a metallic mold for manufacturing the stamper on which a convex shape corresponding to a concave shape to be formed on the a surface of the stamper contacting with the resin material, is formed;

forming an anti-corrosion film made of an alloy selected from the group consisting of a nickel alloy, a silver alloy and a copper alloy on the surface of the stamper manufacturing metallic mold on which the afore-mentioned said convex shape is formed;

laminating a metallic metal layer as a metallic main body on said anti-corrosion film by means of an electroplating method; and

subsequently separating both said metal-layer metallic main body laminated on the anti-corrosion film together with the anti-corrosion film from the stamper manufacturing metallic mold at the same time.

6. (Currently Amended) A method for manufacturing the a stamper used in the an injection molding using the of a substrate out of a resin material, characterized in that said method comprises steps of:

using providing a metallic mold for manufacturing the stamper on which a concave shape corresponding to a convex shape to be formed on the a surface of the stamper contacting with the resin material, is formed;

forming an anti-corrosion film made of an alloy selected from the group consisting of a nickel alloy, a silver alloy and a copper alloy on the surface of the stamper manufacturing metallic mold on which the afore-mentioned said concave shape is formed;

laminating a metallic metal layer as a metallic main body on said anti-corrosion film by means of an electroplating method; and

subsequently separating both said metal layer metallic main body laminated on the anti-corrosion film and the anti-corrosion film from the stamper manufacturing metallic mold at the same time.

7. (New) A stamper used for injection molding method of manufacturing a substrate made of a resin material, comprising:

a metallic main body; and

an anti-corrosion film with a thickness of 30-200 nm comprising any one of an alloy selected from the group consisting of a nickel alloy, a silver alloy and a copper alloy, wherein the anti-corrosion film is formed on the surface of the metallic main body to come in contact with the resin material, thereby preventing corrosion of the metallic main body.

8. (New) A stamper according to claim 7, wherein the nickel alloy comprises nickel as a main ingredient and one or more element selected from the group consisting of ruthenium, copper, phosphorus, magnesium, chromium, gold, silicon, titanium and silver, is added thereto.

9. (New) A stamper according to claim 7, wherein the silver alloy comprises silver as a main ingredient and at least one element selected from gold or copper is added thereto.

10. (New) A stamper according to claim 7, wherein the copper alloy comprises copper as a main ingredient and at least one element selected from silver or titanium is added thereto.

11. (New) A stamper according to claim 7, wherein, under the anti-corrosion film contacting with the resin material, a convex or concave pattern is previously formed on the surface of the metallic main body.